Generic 3D Visualization of Beam Dynamics in Accelerators

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We report on a generic 3D graphing system for visualizing huge
multidimensional data sets of accelerator and beam line simulations.

The phase space data on the grid together with the survey information
obtained from MAD9p runs are post processed and then translated into
photo realistic ray traced animations. HPC is used for the calculations
as well as the rendering process.

Various animations of simulations involving complicated beam lines and
accelerator structures will be shown. The potential use of such
tools for designing and operating accelerators and beam transport
systems will be discussed.

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